

**ELECTRONIC BI-STABLE PULSE RELAY**  
 group-type

**BIS-412**  
 24V

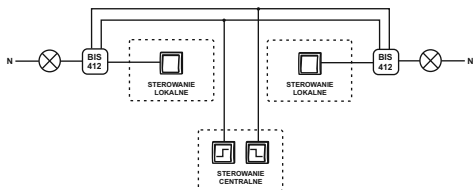
**WARRANTY.** The F&F products are covered by a warranty of the 24 months from the date of purchase. Effective only with proof of purchase. Contact your dealer or directly with us. More information how to make a complaint can be found on the website:  
[www.fif.com.pl/reklamacje](http://www.fif.com.pl/reklamacje)



**CE** Do not dispose of this device in the trash along with other waste! According to the Law on Waste, electro coming from households free of charge and can give any amount to up to that end point of collection, as well as to store the occasion of the purchase of new equipment (in accordance with the principle of old-for-new, regardless of brand). Electro thrown in the trash or abandoned in nature, pose a threat to the environment and human health.

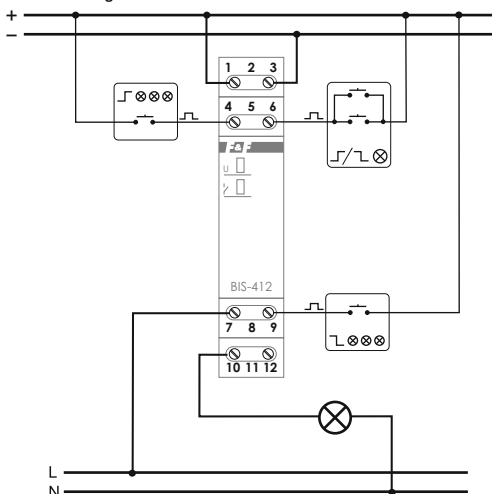
**Purpose**

BIS-412 electronic bistable pulse relay is designed to work in a group system. Single relay allows you to switch the controlled receiver on and off after each current pulse triggered by pressing a momentary (bell) button of a local control that is connected to that relay. The group system allows you to switch on and off all receivers connected to each relay using the buttons of the local control.



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**Connection diagram**



**Assembly**

1. Turn OFF the power.
2. Put on the relay on the rail in the switchgear box.



Do not install a device, that is damaged or incomplete.

3. Connect the power cable to contact 1-3 with marks.

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**Functioning**

The relay power supply is indicated by a green LED.

**Local control**

Receiver switching on - indicated by a red LED - occurs after current pulse triggered by pressing any momentary button from the local control group.  $\text{J}/\text{L}$ . Contact of the relay is switched to position 7-10. Next pulse will switch the relay off (the contact then returns to position 7-12).

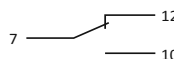
**Central control**

SWITCH OFF ALL - after current pulse triggered by pressing a momentary button  $\text{L}$  all receivers that are individually controlled by a particular relay will be switched off (regardless of their status - on or off). Contact in all relay will be switched to position 7-12.

SWITCH ON ALL - after current pulse triggered by pressing a momentary button  $\text{J}$  all receivers that are individually controlled by a particular relay will be switched on (regardless of their status - on or off). Contact in all relay will be switched to position 7-10.

**Description IN/OUT**

- 1 - 3 power supply 24V (+ / -)
- 6 local control - SWITCH ON / SWITCH OFF
- 4 central control - SWITCH ON ALL
- 9 central control - SWITCH OFF ALL
- 7-10-12 separated contact - 1xNO/NC



With the DC supply voltage, control inputs can be powered only by the „plus“ (+) wire.

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Group of relays working with a common central control must be powered by the same line (~) for AC, or only by (+) for DC.



Exercise extreme caution when installing the controller. Improper connection may damage the controller or connected devices.

4. Connect both local and central control switches accordingly to the terminals of the relay in accordance with the function and to the common wire (~) or (+).



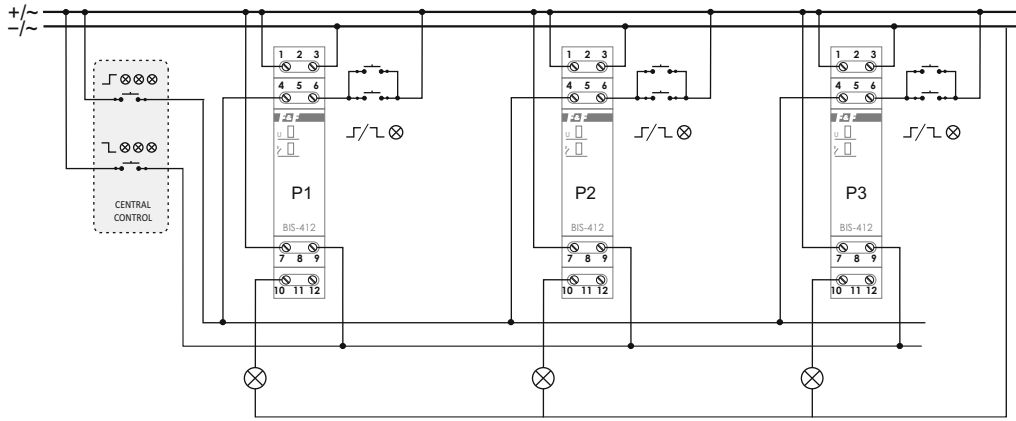
Connecting various lines (~) or (+) to the control inputs of the relays may cause improper operation of the system and lead to the destruction of the controllers

5. Connect in series the contact of the relay into the power supply circuit of the controlled receiver (lighting). Connect power supply to terminal 7; controlled receiver power from contact 10.
6. Turn on the power supply.

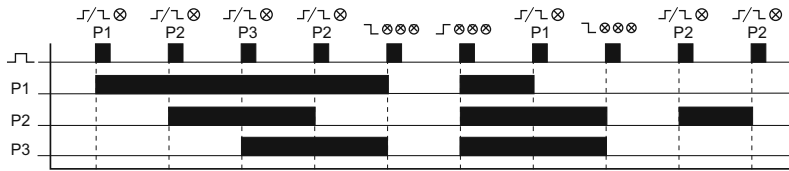
**Technical data**

power supply	24V AC/DC
current load	<16A
contact	1xNO/NC
activation delay	<0.2sec
power indication	green LED
signalling activation	red LED
power consumption	0.8W
working temperature	-25÷50°C
terminal	2.5mm <sup>2</sup> screw terminals
dimensions	1 module (18mm)
mounting	on TH-35 rail
ingress protection	IP20

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Group system diagram



Diagram